

BALTIMORE CITY

CRITICAL AREA

MANAGEMENT PROGRAM

City of Baltimore
Department of Planning



October 19, 2004

City of Baltimore-Department of Planning
2002 CRITICAL AREA MANAGEMENT PROGRAM SUMMARY AND BASIC
DEVELOPMENT APPLICATION PACKAGE

The State of Maryland Chesapeake Bay Critical Area Law establishes the Chesapeake Bay Critical Area Commission (CAC) and requires that the City of Baltimore and other jurisdictions prepare and adopt a Critical Area Management Program (CAMP) to:

- (1) Improve the water quality of the Bay by controlling pollution from stormwater runoff and;
- (2) To conserve and protect wildlife habitat along the shoreline of the Bay.

Date of the Program

The City's Critical Area Management Program (CAMP) became effective with the adoption of Ordinance Nos. 1130, 1131, and 1132, effective January 4, 1988. The City's CAMP has most recently been reviewed, repealed and reordained by Ordinance 02-350, effective June 13, 2002 and approved by the Chesapeake Bay Critical Area Commission on November 13, 2002. The terms and conditions contained herein reflect the most current amendments to the CAMP.

Critical Area Boundaries and Sub-Areas

The CAMP establishes guidelines for development of properties within the 1,000-foot strip of land measured from the mean high tide line or the bulkhead. The first 100 feet landward of the water is called the Buffer. The Critical Area is also separated into additional sub-areas (see the attached maps for boundaries). The sub-areas are:

:

- Intensely Developed Areas (IDA)
- Resource Conservation Areas (RCA)

An additional environmentally sensitive area within the Critical Area is the Designated Habitat Protection Areas. There are twelve Designated Habitat Protection Areas (DHPA) in the City of Baltimore. These areas function as additional overlay districts from the IDA and RCA areas and there may be some overlap on individual parcels; special protection requirements apply. These are by no means all of the important habitats effectively intermingled with industrial areas, interstates and neighborhoods in the City, but these DHPA's have been mapped and surveyed and are especially important habitat for seasonal waterfowl and as fish habitat areas. Please check with the Department of Planning if any special overlay district requirements affect your site.

Critical Area Review

Within the areas identified above, any of the following actions will trigger Critical Area review:

- 1) Building/Grading Permit
- 2) Rezoning
- 3) Subdivision

- 4) Conditional Use/ Special Exception
- 5) Zoning Variance

After a preliminary review, Department of Planning staff will decide if a project is considered "significant" by the following criteria:

- 1) If there is any disturbance in the Buffer;
- 2) If there is a disturbance of 10,000 square feet outside the Buffer; or
- 3) If improvements are being made to an existing structure that are 50% or more of the base full cash value of the property.

Disturbance is defined as breaking the soil. Only significant development is subject to the special provisions or restrictions outlined below.

“Significant” Project Process

If a project is deemed significant, the following is the minimum that will be requested:

- a. Two copies of the site plan (use the Site Plan Review Committee Requirements list-in Section X). ;
- b. Two copies of the landscaping plan;
- c. Two copies of Worksheet A showing the proposed pollution reduction method (in Section X);
- d. Send an additional set of above to DPW Development Center with City’s stormwater and sediment and erosion control materials.
- e. Two copies of the Habitat Protection Assessment and the “Habitat Assessment Field Form”[Worksheet] if there will be any encroachment in a Designated Habitat Protection Area. You must request these forms from the Planning Department.
- f. A copy of the CAMP Program Certification and Landscape Maintenance Agreement (in Section X). These must be copied onto the landscape plan and signed with the permit set.
- g. Copy of the planting details spliced onto the landscape plans.

Once the Department of Planning and DPW receives the above, they are reviewed and Planning sends a copy to the Critical Area Commission in Annapolis as required by the Critical Area Act. The Department of Public Works will check the applicant’s runoff pollution reduction requirements and the proposed best management practices. Determinations of Buffer establishment and all additional requirements are the responsibility of the Department of Planning. Once all these agencies have specified if the project meets the requirements, the Department of Planning will sign off on the building permit application plan sets. All developers will be required to meet any additional Building Code or other code requirements before the building permit is issued.

Water Quality

All significant development or redevelopment regardless of development area, shall reduce runoff pollution from the site by a minimum of 10%. If it can be demonstrated that this is infeasible, developers are required to pay into an offset program managed by

the Planning Department so that water quality improvement goals can be met elsewhere in the City's watershed.

Buffer Requirements

All significant development or redevelopment within the Buffer portion of the Critical Area is subject to special Buffer establishment and/or habitat protection requirements depending on the location of the property. Development within the Buffer is discouraged; disturbance within the Buffer is subject to a fee of at least \$2.50 a square foot of disturbance. Funds raised are used to improve Buffer habitat in other portions of the watershed.

Summary of Requirements within the Buffer

Sub-Area	Developer Requirements	Offset
IDA-Waterfront Revitalization Sub-Areas	<ul style="list-style-type: none"> Developer may develop up to 100% of the Buffer area. Developer must pay an offset fee for total Buffer area that is not landscaped/vegetated. Does not pay Buffer offset fee for the area designated as "promenade". 	\$2.50 per square foot
IDA-Waterfront Industrial Areas	<p>Water Dependent Use*</p> <ul style="list-style-type: none"> Developer may develop up to 100% of the Buffer area Developer must pay an offset fee for total Buffer area that is not vegetated. Removing 20% of pollutants (in Buffer) can be substituted for the Buffer fee. <p>Non-Water Dependent Use</p> <ul style="list-style-type: none"> Developer may develop up to 50% of the Buffer provided: <ol style="list-style-type: none"> Vegetation is planted on the remaining 50% of Buffer on-site or Payment is made to the offset fund for all Buffer areas not vegetated. 	\$2.50 per square foot
Resource Conservation Areas	All land is either publicly owned parkland, a natural habitat area or restricted by floodplain regulations. Only water-dependent facilities for public use may be developed within the Buffer. Natural vegetation must be planted elsewhere in the Buffer equal to three times the land areas disturbed by any development.	\$5.00 per square foot for the Buffer area developed
<p>*Where the Buffer comprises 15% or more of the development site, the developer may develop as much as 100% of the Buffer, but must also offset for the total Buffer not vegetated. Any site where the Buffer is over 50% of the site, a maximum of 50% of the offset fee will be charged. Within the Waterfront Industrial Area and the Waterfront Revitalization Areas, Buffer offset fee costs shall not exceed 2% of the proposed new development or redevelopment costs. This does not include land costs.</p>		

Small Projects:

As part of the 2002 CAMP review process, the Department of Planning made it a goal to simplify the process for smaller projects, especially when the projects were “gut” rehabilitations, etc. of existing rowhouses. The following regulations reflect those changes and better reflect the goals of the State’s cutting edge Smart Growth legislation and specialized rehabilitation building code and the general goals to bring more citizens into the City and re-populate areas with existing infrastructure.

Residential projects: Development activities on existing structures for residential use outside of the 100-foot Buffer on sites less than 1,500 S.F. do not pay offset fees even if the project activates the 50% assessment criteria. This does not apply to new subdivisions or new construction.

Non-residential projects: Development activities on existing structures in Residential, Office-Residential and Business zoning districts for commercial use outside of the 100-foot Buffer on sites less than 2,000 S.F. do not pay offset fees even if the project activates the 50% assessment criteria. This does not apply to new subdivisions or new construction.

The City’s CAMP Manual is online at:

<http://baltimorecity.gov/government/planning/available.html>

It must be viewed using Adobe Acrobat software, which is available on the WEB for free downloads. The Manual contains the Worksheet A (a copy is also attached for your convenience) and planting specifications. Please use the State of Maryland Chesapeake and Atlantic Coastal Bays Critical Area Commission December 2003 Manual for Best Management Practice design and other Critical Area policy issues at:

http://www.dnr.state.md.us/criticalarea/10percent_rule.html

VERY IMPORTANT: Please note that the City’s CAMP and the separate Stormwater Quality Regulations administered by the Bureau of General Services, (Development Center) Department of Public Works, are indeed, SEPARATE regulations. The phosphorous removal required in the CAMP is different than the DPW regulations DPW); offset fees are also calculated differently. Please be aware of these differences as you develop your project.

For additional information and help with your submittal materials, please call Duncan Stuart, Critical Area Planner, in the Planning Department at 410-396-5902 or e-mail him at Duncan.Stuart@baltimorecity.gov.

**Thank You for Helping to Clean Up the Chesapeake Bay and Investing
in the City of Baltimore!**

CITY OF BALTIMORE
CHESAPEAKE BAY CRITICAL AREA MANAGEMENT PROGRAM

Worksheet A: Standard Application Process

Calculating Pollutant Removal Requirements *

Project Name/Address: _____

Step 1: Project Description

A. Calculate Percent Imperviousness

- 1) Site Acreage = _____ acres
- 2) Site Imperviousness, existing and proposed.

	(a) Existing (acres)	(b) Post-Development (acres)
rooftop	_____	_____
roads	_____	_____
sidewalks	_____	_____
parking lots	_____	_____
pools/ponds	_____	_____
decks	_____	_____
other	_____	_____
	_____	_____
Impervious Surface Area	_____	_____

Imperviousness (1)

Existing Impervious Surface Area/Site Area = (Step 2a)/(Step 1)= _____

Post-Development Impervious Surface Area/Site Area = (Step 2b)/(Step 1)= _____

B. Define Development Category (circle)

- | | |
|---------------------------|--|
| 1) Redevelopment | Existing imperviousness greater than <u>15%</u> I (<i>Go to Step 2A</i>) |
| 2) New development | Existing imperviousness less than <u>15%</u> I (<i>Go to Step 2B</i>) |
| 3) Single Lot Residential | Single lot being developed or improved; single family residential; and more than <u>250</u> square feet being disturbed. |

*NOTE: All acreage used in this worksheet refer to areas within the Intensely Developed Areas of the Critical Area

Step 2: Calculate the Pre-Development Load (L_{pre})

A. Redevelopment

$$\begin{aligned}
 L_{pre} &= (R_v)(C)(A) 8.16 \\
 R_v &= 0.05 + 0.009(I_{pre}) \\
 L_{pre} &= (\quad)(\quad)(\quad) 8.16 \\
 &= \underline{\hspace{2cm}} \text{ lbs P/year}
 \end{aligned}$$

where:

- R_v = runoff coefficient, which expresses the fraction of rainfall which is converted into runoff.
- I_{pre} = site imperviousness (i.e., 1=75 if site is 75% impervious)
- C = flow-weighted mean concentration of the pollutant in urban runoff (mg/l).
- C = 0.30
- A = area of the development site (acres in the Critical Area).
- 8.16 = includes regional constants and unit conversion factors

OR

B. New Development

$$\begin{aligned}
 L_{pre} &= 0.5 \text{ lbs/year} * A \\
 &= (0.5)(\quad) \\
 &= \underline{\hspace{2cm}} \text{ lbs P/year}
 \end{aligned}$$

Step 3: Calculate the Post-Development Load (L_{Post})

A. New Development and Redevelopment

$$\begin{aligned}
 L_{post} &= (R_v)(C)(A) 8.16 \\
 R_v &= 0.05 + 0.009(I_{post}) \\
 &= 0.05 + 0.009(\underline{\hspace{2cm}}) = \underline{\hspace{2cm}} \\
 L_{post} &= (\quad)(\quad)(\quad) 8.16 \\
 &= \underline{\hspace{2cm}} \text{ lbs P/year}
 \end{aligned}$$

where:

- R_v = runoff coefficient, which expresses the fraction of rainfall which is converted into runoff.

I_{post} = site imperviousness (i.e., $I=75$ if site is 75% impervious)
 C = flow-weighted mean concentration of the pollutant in urban runoff (mg/l).
 $C = .30$
 A = area of the development site (acres).
 8.16 = includes regional constants and unit conversion factors.

Step 4: Calculate the Pollutant Removal Requirement (RR)

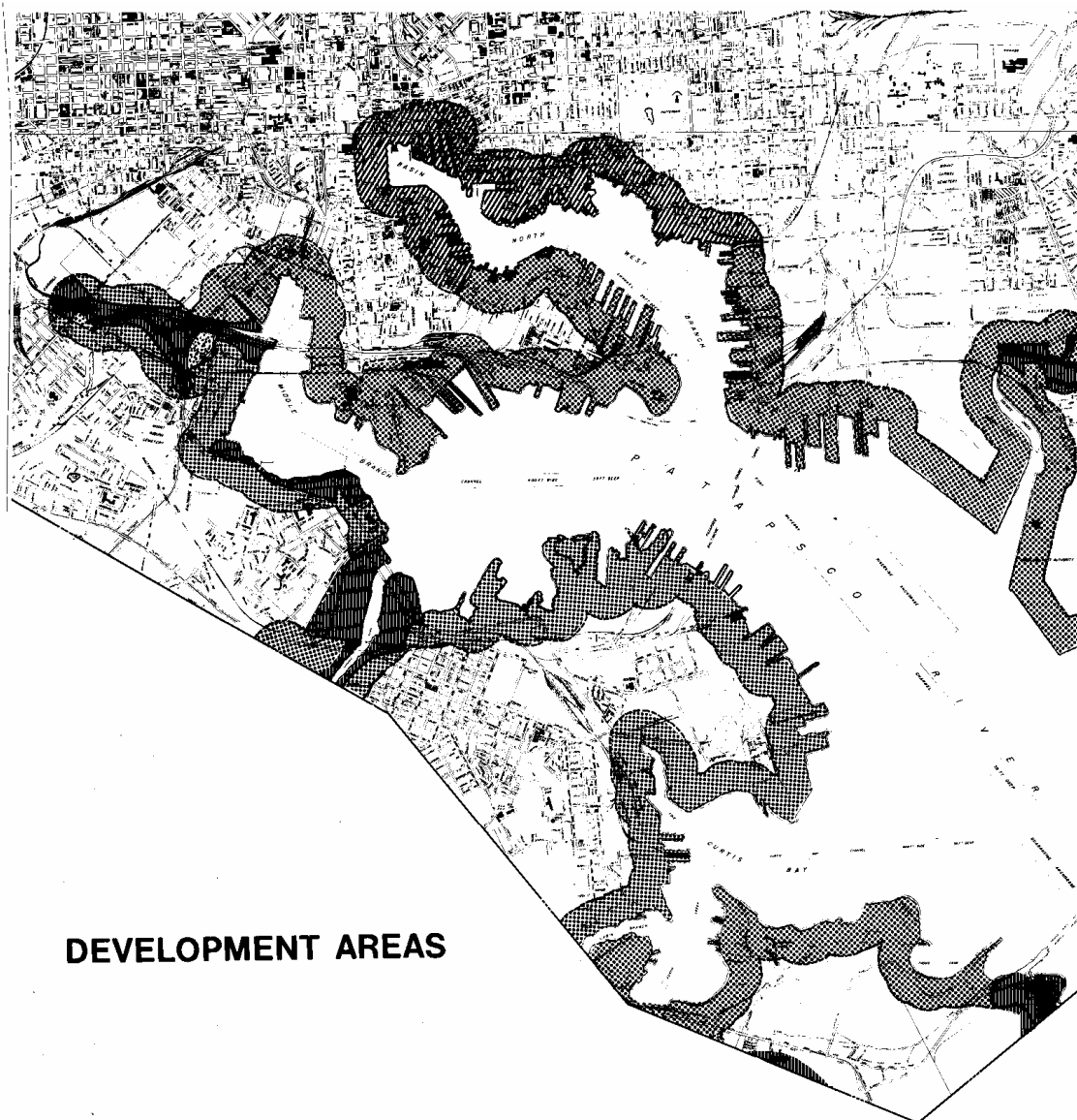
$$\begin{aligned}
 RR &= L_{\text{post}} - (0.9)(L_{\text{pre}}) \\
 &= (\quad) - (0.9)(\quad) \\
 &= \text{_____ lbs P}
 \end{aligned}$$

Step 5: Identify Feasible Urban BMP

Select BMP Options from the 2000 Maryland Stormwater Design Manual Volumes I & II. See Appendix D-4. Stormwater Criteria of the MD Critical Area IDA Zone.....Standard Application. Calculate the load removed for each option. Removal efficiency rates are shown in Table D.4.7

BMP Type	(TP%)		(Fraction of Drainage x Area Served)	(L post)	Load Removed
_____	_____	x	_____ x	_____	=_____ lbs
_____	_____	x	_____ x	_____	=_____ lbs
_____	_____	x	_____ x	_____	=_____ lbs
_____	_____	x	_____ x	_____	=_____ lbs

If the Load Removed is equal to or greater than the pollutant removal requirement (RR) calculated in Step 4, then the on-site BMP option complies with the 10% Rule.



DEVELOPMENT AREAS

- RESOURCE CONSERVATION AREAS
- REVITALIZATION AREAS
- INDUSTRIAL AREAS



DESIGNATED HABITAT PROTECTION AREAS

↑
North